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from the  
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meetings,  
St. Louis,  
Proprietor.

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# COLUMBIA



Established 1848.

## Sorgo Department.

National Sugar Growers' Association.

OFFICERS FOR 1884.

President—Norman J. Colman, St. Louis, Mo.  
Vice Presidents—Capt. B. Blakely, Minnesota; D. F. Kenner, Louisiana; X. K. Stout, Kansas; A. Furnas, Indiana; C. F. Clarkston, Iowa; A. J. Decker, Wisconsin; A. G. Williams, New York; Dr. E. F. Newberry, Ill.  
Secretary—F. K. Gillespie, Edwardsville, Ill.  
Treasurer—J. A. Field, St. Louis, Mo.

### Now for Seasonable Reports.

We shall be glad to hear that the Northern cane is all worked up into sirup and sugar. Sorghum men have been so busy the past month, many of them not only working all day, but far into the night, that they have had no time to write for their department in the *RURAL WORLD*. This makes it difficult for us to keep that department fresh and instructive. There is really no sorghum literature for us to fall back upon. It is true we are making a literature of our own in and through the volumes of the *RURAL WORLD* every year, but in a few years from now when we look back upon it, we will be astonished at how little we knew at this stage of the sorghum industry.

Just as soon as our readers get a little breathing spell we hope they will make up for lost time by giving us an account of their success with the different varieties, telling which have proved most profitable, giving their experience in filtering, decanting, evaporating, handling and marketing their sirups. Nearly all close observers have made some advances the present year, and will do differently another year from what they have done in the past. Will they not tell us of the improvements they have made, of the errors into which they have fallen, the mistakes which have occurred, so that others with less experience may avoid them.

We shall be glad to hear from all along the line. Although sugar is low and the outlook not as bright as one might desire, yet, what other branch of farming pays better or even as well? Sugar is one of the great necessities of human living and will always be and can be made cheaper from sorghum than from any other product. If the seed is properly saved and properly used for stock feed, it ought really to pay the entire cost of raising the cane, which neither the refuse of the sugar beet nor the ribbon cane will do.

We look for a largely increased planting of cane another year and believe that it will increase from year to year until a supply for the wants of the American people will be obtained so that we will be independent of foreign nations for sugars and sirups.

Will our readers please bear in mind that we are very anxious to hear from them to learn what have been their successes the present season.

### National Sugar Growers' Convention.

We are requested to state when the annual convention of the National Sugar Growers' Association will take place, and being desirous of consulting the convenience of those who will attend it we ask, how would Wednesday December 17th answer? By that time the worlds Industrial and Cotton Centennial in New Orleans should be in full blast and the cane crushing and sugar making of the state be at its height, and those of our friends who wish to visit the south to see both can leave on Friday night Nov. 19th. Let us hear from you, gentlemen, on this matter of time.

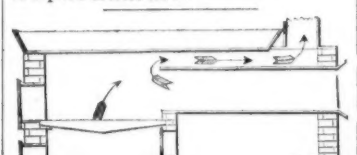
The transportation will be much less than at half the price of other times. We are daily expecting to hear from Mr. Parker Earle or Prof. S. M. Tracy what the exact price from St. Louis to New Orleans and return will be.

### The Sorghum Outlook.

With the exception of the excessive wet weather some three weeks ago, the sorghum growers have had a very favorable autumn for many years for harvesting their cane and making sirup and sugar, and judging from the samples of sirup and sugar coming to the *RURAL WORLD* office, the quality of the product will be much better than ever before. In these times of low prices for wheat, wool, oats and other farm products, the sorghum grower and manufacturer will be quite as well off, and much better off, if prepared to handle and sell his product properly, than those engaged in raising other farm products. He should have had large tanks into which all his best sirup should be put, and from which he could sell to fill orders the year round to his regular customers, whether by the gallon, keg, half barrel or barrel. Sirup should be made so as to keep in perfect condition the year round, and it will sell, if of good quality. The trouble is, that soon as made, most farmers are too much in a hurry to get it off their hands at once. They perhaps need money, and sell it at a sacrifice, and injure themselves and others in the same business. It would be wise for the manufacturers in a neighborhood to get together, and agree upon prices, and then hold out to them. Some will find it to pay when they get time to load up their wagons and take a tour, selling to farmers by the gallon or keg. Let the farmer see and taste a good article, and he will buy a supply for the year, which will be far better than the adulterated stuff he buys at the stores. In this way he can establish a trade, and have a regular set of customers every year, who will gladly buy of him.

The sirup made from northern sugar cane is not necessarily better or purer than that made from ribbon cane, but the one is made by those who know not how to

adulterate it and is by them sold to the consumer, whereas the other is manufactured in larger quantities and passes through a large number of hands ere it reaches the consumer. Farmers should supply themselves with what they want of a pure article now.



The above is an illustration of a Bagasse burner just patented by John C. Semones, which will claim the attention of the sorghum growers next season to a certainty, for the reason that it possesses improvements over all others heretofore made. Will dry the bagasse without additional fuel, and burn it out. Call upon or write him at Hotel Hunt, St. Louis, Mo.

### Rebuilding With Vim.

Messrs. Folger, Wilde & Co., the well-known manufacturers of the Old Bluff Self Skimming Evaporator of Washington, Iowa, whose foundry and factory were entirely destroyed by fire a few weeks since, write us that they commenced to rebuild on the 14th of October, and that if the weather continues good, they will make things lively again in the fall as it may be required. They will build of brick, larger than before and able to do much more and better work. Mr. Folger, is now in Illinois experimenting with a new steam pump patented by him and our Mr. Dan Wilde. Mr. Folger has always been very sanguine about it and seemed to expect more than we thought was safe to calculate on. He has run it about a week, and writes it exceeds his most sanguine expectations in many respects, and equals them in every one and into the other so that the steam and heat that arise from the bottom pan help to boil the top. The steam after going through and doing its work in the bottom coil passes into the top coil, where it does its work in decanting is done, thus using the heat that is usually wasted in doing good work. We hope to show something good and novel in this line next year.

### The Boomer Filter.

EDITOR *RURAL WORLD*: I noticed some time ago, a statement from a correspondent of your paper, who, in giving the best method for making sorghum, told your readers that no filter would filter sorghum, that they were failures, etc. I wish to say that I am making sorghum sirup here in Boston, and if a delegation of the Mississippi Cane Growers' Association will come on here during this month, I will show them several things of importance. First, I will show them that I can filter to perfection the juice as fast as it may be required, even for the largest plantations. Second, I will show them that from every 1,000 lbs. of cane I will take out at least 750 lbs. of juice by weight, not by guess. Third, I will show them a continuous process involving from beginning to end a time not exceeding 30 minutes, which time includes the cutting of the cane, pressing out the juice, filtering and evaporating. It was my intention to exhibit at your fair my filter, but I was prevented by putting in the exhibit which I can now show the above results.

Very respectfully,

O. F. BOOMER.

Boston, Oct. 16th, 1884.

Beet Sugar not Profitable—The Diffusion System to be Tried in This Country.

Ex-Gov. H. C. Warmoth of Louisiana arrived in the steamship Arizona, Gov. Warmoth, in company with Mr. G. L. Spencer of the department of agriculture, who also arrived yesterday on the steamship Auraria, has been traveling through France and Germany, making a study of the beet-sugar industry of those countries and of the processes employed. The governor said last night: "The sugar industry in those countries is in a very much muddled condition. The governments have subsidized the manufacture up to that point where it does not pay the costs of production. The price of sugar in the London market today is about \$2.50 (10s.) a hundredweight, while the cost of producing it in Germany is about \$6 (24s.) a hundredweight. Sugar making in Germany is chiefly carried on by the farmers, who have clubbed together, organized the companies, and divided the stock among themselves. Each farmer binds himself to grow at least three and a half acres of beet for each share of stock he holds, and is subject to a fine if he fails to do so. The result is that most of them grow more than the minimum acreage. The mills by which the beets are crushed (the equivalent of 22 shillings a ton) they pay a tax to the German Government of 16 marks a ton, and the cost of manufacture amounts to about 10 marks a ton, making the total cost of production 45 marks per ton. A ton of beets produces two hundredweight of sugar, so that the cost of the sugar is 24 marks (about \$6) a hundredweight. The annual product of Germany is about 900,000 tons of sugar. The government subsidy is given in the form of a rebate of the tax on all sugar that is exported. As this is really a premium on the exportation of sugar the article is actually much higher priced in Germany than it is in England, and about three-fourths of the product is exported. Still the article, as you can see, does not pay the cost of production, and the problem just now presented to the manufacturers is how to reduce that cost. It can be solved only by the reduction of the price of beets, to which,

however, the farmers, who are the real mill owners, strenuously object, and the reduction of the tax on beets. "The methods employed in the manufacture of sugar are greatly superior to ours. The beets are not crushed as in our cane, but are cut into thin slips and treated under a system of diffusion, in which the principle of osmosis is applied. In that system the slips of beet are subjected to repeated drenchings of hot water, until a chemical test of the beet substance shows that every particle of sugar has been extracted, consequently there is no waste of sugar as there is in the grinding of cane. The diffu-sion system can be applied to cane also, but the cane will have to be cut in slices instead of being round. I am informed by letters I have received that Dr. Loring, the head of the department of agriculture, is now erecting a battery for the trial of the diffusion system on my plantation in Louisiana."

The governor is in fine health and spirits, and says that he has enjoyed his trip abroad very much.—New York Times.

### We are a Sugar-Eating People

Prof H. W. Wiley says the consumption of sugar per head in the United States, during the last year was not far from 45 pounds. For 35,000,000 people, this amounts to two billion four hundred and seventy-five million pounds (2,475,000,000 lbs.) Even at the low rates at which sugar is now selling, the total cost is enormous. We can safely estimate the last cost, i. e., the retail price paid by consumers, at 8 cents per pound. The expense per person is therefore (45x8) equal to \$3.60. The total expenses of our national government are less than \$250,000,000 annually, or only about \$4.50 per inhabitant. It is thus seen that the cost of sugar to our people is but about a dollar per head less than the taxation of National purposes.

This does not include the cost of molasses of which the amount imported into the United States, for 1883, was in round numbers thirty million gallons. The quantity of molasses produced in Louisiana in 1882-83 was 15,716,755 gallons. Of the foreign molasses, coming mostly from Cuba and other West India Islands, the greater part is reboiled, producing a second crop of sugar crystals. The molasses from the second crop is used either by distillers or mixers, or sent to England where it is used for table purposes under the name of "treacle."

But what is thus lost is more than replaced by the manufacture of glucose sirups. These are made by mixing the colorless glucose with enough sugar-colored molasses to give it color and flavor suitable for the table. The quantity of glucose manufactured in the United States is hard to estimate. Manufacturers are reticent as regards the magnitude and details of their business. Fortunately however, for statistical purposes, the number of glucose factories in Louisiana is only about one hundred. The quantity of liquid glucose made in this country annually is probably not less than thirty million gallons, each bushel of corn making from 10 to 11 quarts, or 2 1-2 to 3 1-4 bushels. The quantity of glucose sirups made and consumed is certainly not less than twenty million gallons.

Another source of molasses is sorghum. In sorghum products the collection of accurate data is quite impossible. Unlike glucose, sorghum sirups are made at thousands of different places and in small quantities. The number of sugar factories in Louisiana is only about one thousand, but who can enumerate the sorghum mills that dot the landscape of the whole country? I doubt whether there is a State or Territory in the Union in which no such factory exists. But thanks to the industry of a few collectors of statistics, we are able to give a fair approximation of the yield of sorghum sirup during the last year. It will be safe to put this at 15,000,000 gallons, which is certainly not an over estimate.

Of foreign importation..... 10,000,000  
Produce in Louisiana..... 15,000,000  
Sugar from sorghum..... 15,000,000  
Made from corn-stalks..... 20,000,000  
Total..... 60,000,000

To this we should add the product of the maple forest, which, although not large in amount, is yet important. We have then in all not less than sixty-one million (61,000,000) gallons entering into consumption, or a little over one gallon of molasses and sirup per inhabitant. The average retail cost of these sirups to the consumer, is not less than 50c. a gallon, or \$300,000,000. Add this to the retail cost of sugar, viz. \$188,000,000, and we have the total of \$2,188,000,000 as the actual cost of sugar and molasses to the consumer of our country. This is a figure which may well cause us not only to wonder, but also to study carefully the economic side of the problem.

SUGAR SUPPLY IN OTHER COUNTRIES.

In order to have a proper idea of the sugar industry of our own country, it is necessary that we look at other lands.

BEST SUGAR PRODUCTION OF EUROPE FOR THE FOUR PRECEDING YEARS.

SEASON OF 1881-4 1882-3 1883-2 1884-1

Countries. Tons. Tons. Tons. Tons.

Germany..... 940,000 848,121 644,773 594,223

France..... 465,000 423,194 393,369 333,614

Austria-Hungary..... 445,000 473,092 411,015 408,082

Poland..... 210,000 294,491 398,779 250,000

Belgium..... 305,000 32,723 73,136 68,620

Holland and other lands..... 40,000 35,000 30,000 30,000

Totals..... 2,505,000 2,146,534 1,860,974 1,774,243

The above figures are official, save for

the last year, but estimates are within almost 2,000 or 3,000 tons of the figures which the official report will show as soon as finished.

SUGAR MADE FROM CANE.

The production of sugar from cane is much more difficult to determine with accuracy. At best, only estimates of it can be given. The crop of 1881 is estimated by Wm H. A. Brown at 4,900,000 tons, distributed among sugar producing countries as follows:

Countries. Tons.  
British India..... 1,000,000  
Cuba and Spanish Possessions..... 750,000  
Brazilian Empire..... 750,000  
Ceylon..... 250,000  
French West Indies, Guiana, etc..... 175,000  
Manilla, Philippine Islands..... 135,000  
Siam..... 125,000  
Sri Lanka..... 125,000  
Java..... 125,000  
Hawaii..... 125,000  
Mexico..... 125,000  
All other countries..... 160,000

Total from sugar cane..... 4,900,000

Allowing for a reasonable increase during the three years which have passed since the above estimate was made, we may now safely place the world's product of cane sugar at 5,000,000 tons. The yield of maple and sorghum sugar is now too small to have any place in the total estimate of the product of the world which is therefore the sum of the beet and cane sugar. The quantity of sugar to the total of 7,395,000 tons! This number shows that the sugar industry of the world occupies no mean portion of its capital and labor.—I will return now to a more minute discussion of the sugar industry of the United States.

SUGAR PRODUCT OF LOUISIANA.

The indigenous, consumed in this country, is derived from four sources, viz.: (1) The sugar cane, growing chiefly in Louisiana; (2) the beet, growing chiefly in California; (3) the maple, growing chiefly in New England, New York, and Ohio, and (4) the sorghum, growing over the entire area of maize production. Of these sugars, the only one of any commercial interest at the present time is that from the sugar cane of Louisiana. I append a statement of the product of sugar in Louisiana from 1828 to 1882-3-4:

LOUISIANA SUGAR CROPS, 1828 TO 1882-3-4.

Crop of Sugar Cane. Crop of Molasses.  
1828..... 21,222 1828..... 439,324  
1829..... 122,382 1829..... 321,344  
1830..... 215,314 1830..... 227,247  
1831..... 215,314 1831..... 227,247  
1832..... 215,314 1832..... 227,247  
1833..... 215,314 1833..... 227,247  
1834..... 215,314 1834..... 227,247  
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1880..... 215,314 1880..... 227,247  
1881..... 215,314 1881..... 227,247  
1882..... 215,314 1882..... 227,247  
1883..... 215,314 1883..... 227,247  
1884..... 215,314 1884..... 227,247

It appears from the above that the product of sugar in Louisiana during the last twenty years has not increased. There have been, it is true, great fluctuations in the yield, but the average has been about the same, and has not been due solely to the seasons, and not to any permanent cause.

I am far from believing that Louisiana is not capable of yielding far larger crops than the last few years show. There is no reason why the phenomenal yield of 1860-1 should not be duplicated.

But I will not stop to discuss here the causes, political and agricultural, that have prevented the increase in the sugar product of Louisiana. My object was to try an experiment with cane in Illinois for the purpose of making sirup. I plowed the ground as soon as the frost was out, very shallow, then hauled 21 loads of slaked ashes and stable manure on the ground, for which I paid \$1.75. I then harrowed it well, and let it lie till it was ready to plant. I then plowed it again, very deep, turning the manure and all under. I then sowed one and one-half bushels of salt on the piece, for which I paid 75 cents, then harrowed it, laid off both ways three feet apart. I dropped the seed by hand ten to a hill, and covered with a hoe. My object for twice plowing was to get the manure down far enough for the main roots to reach it, and thus give strength to the plant for the cane plants, when they first shoot through the ground, are very minute and tender. And again by plowing to the bottom, and by sprouting the seed before planting, I gave strength to the plant for the cane plants, when they first shoot through the ground, are very minute and tender. And again by plowing to the bottom, and by sprouting the seed before planting, I gave strength to the plant for the cane plants, when they first shoot through the ground, are very minute and tender.

WHAT TO BUY.

Considering the question from the narrowest possible standpoint of the man who will buy but two or three works, I should be constrained much against my judgment to recommend the hand book of farming or one of the few encyclopedias of farming or of stock growing, etc. Farming is so broad that no man nor one work can cover it with any degree of satisfaction. We must have our authorities for each department of farming, and then we fail to obtain a work that is exhaustive of that special field. While advising against the all purpose book in favor of special works, yet I do not hesitate to advise one to buy this class of works at once, rather than indulge in none.

I paid Mr. Wiley, of Southern Illinois, \$1 for seed. When the time to harvest came I hired a man to cut 75 cents per day. We were two days stripping. We pulled off the blades and put them in heaps and while the dew was on bound the leaves in bundles, then cut the stalks and piled it up. I hauled my tops and fodder to the barn. I employed Mr. Hoge to make my sorghum, he having one of those portable evaporators. My cane made me 244 1-2 gallons, for which I paid \$3.00 for making. I sold my sirup for \$17.80. It was a fine sample.

This is not all the gain. I had 48 head of sheep which weighed 64 pounds per head; I fed them on the tops and fodder four months, then weighed them, and found they had gained 38 1-2 pounds. I sold at four cents per pound, which made me \$2.34 per head for my feed.—Prairie Farmer.

## Agricultural.

### Farm Literature.

AGRICULTURAL COLLEGE, COLUMBIA, MO., Oct. 17, 1884.

EDITOR *RURAL WORLD*: I will endeavor in this article to answer, in part, the query of farmers that suggest the discussion in a former article, from my paper, I am now by a young farmer, asked to enlarge the scope of my answer, and name the best agricultural paper of the country. It would be imprudence to add to the ordinary list of mistakes a compliance with this desire even if I am qualified to select the best from several and monthly. I believe that I have 15 such papers, and there are none of them from which I do not gain something. While, as yet, there are but a small fraction of farmers that take a farm paper, I am confident that all farmers would find it profitable to take more than one. Each paper has its own individualism that is marked, not only in the character of its editorials but in its selections. If we hope to gain the broad impartial view of the growth of farm life and of farm practices, we must patronize more than one center of thought and exchange.

Farming is so varied in its multiplicity of crops, and the domestic animals and complexity of processes that agricultural journalism is growing more and more specialized. The development of periodical agricultural literature in the last twenty years is something remarkable, and of course, phenomena in the world's history. The few agricultural papers have expanded into the many, while the political newspapers of value are now comparatively few that do not make a pretence of offering an agricultural column, or, worse, often worse, than nothing, being clipped with an eye to literary merit alone, yet it is a recognition of the growing art and of a new literature. The invasion that farm thinkers are making in the columns of our literary and scientific monthlies is now great and marks the successful struggle of agriculture to gain recognition among intellectual occupations.

No farmer can afford to be behind the times. Will it not seem strange to some farmers that among the most attentive readers of farm writings are numbered some of the brightest of our professional men.

But the further and truthful remark, more disparaging to those who are not farmers, as more exponents of office farmers, may be made that some of our best educated ladies, town bred and without country experience, are students of farm science because of its inherent attractiveness. I have personal knowledge of a lady of national reputation, whose life has been in the town, who studies farm literature and science.

I wish particularly that our young men might feel the force of the fact that the book has been joined to the plow, according to the full significance of the fact.

A few, or many farmers, think that they cannot afford the farm paper, nor the book. One of the most elegant and forcible farm writers of the country set aside, when a young man, \$50 a year, for what he esteemed the tobacco and perhaps whiskey money of many farmers, and of course has a good library. It is true that papers are not within the reach of our means? If I may liken farming to a farm tool I unhesitatingly affirm that it is the cheapest and most efficient implement on the farm. It acts for itself rather than is acted upon and lays out a deep, far-reaching scheme of farming and executes details with skill. We can afford several papers, including others than farm papers and many books.

This will depend upon our liberality with ourselves, and whether we are to engage in strictly special farming, as many are doing. Broadly and liberally viewed a full library of so-called practical works, of scientific farm works, and of those that are of historic value should be organized.

Considering the question from the narrowest possible standpoint of the man who will buy but two or three works, I should be constrained much against my judgment to recommend the hand book of farming or one of the few encyclopedias of farming or of stock growing, etc. Farming is so broad that no man nor one work can cover it with any degree of satisfaction. We must have our authorities for each department of farming, and then we fail to obtain a work that is exhaustive of that special field. While advising against the all purpose book in favor of special works, yet I do not hesitate to advise one to buy this class of works at once, rather than indulge in none.

I must acknowledge my incompetence to select the best of these works for readers, because I have always avoided them, having only a general knowledge of them aided by a knowledge of their authors.

I will name only three or four of the many: Allen's (R. C. and L.) New American Farm Book, Waring's Hand Book of Husbandry, The American Farm and Home Cyclopaedia. The first cost \$2.50; the second \$2.50, and the third, copiously illustrated and covering a wide range of matter, costs \$10.50 and \$5.50 according to binding. We have other works in the same field, and two or three of English origin.

SPECIAL PRACTICAL WORKS.

I shall not attempt to name works for the specialist, particularly those engaged in gardening and special departments of horticulture. It would require a review of works on the onion, cabbage, squash, grapes, pears, etc., etc., limited almost only by the great variety of plants and fruits.

The specialist is usually alive to his needs and is familiar with the works that may aid him. Nor can I think of naming all of the works of merit, before the public. I shall confine myself to naming important works for a small library of a farmer pursuing mixed husbandry.

As foundation books, I will name, first, Johnson's "How Crops Grow," and also Johnson's "How Crops Grow," companion books. From these scientific works I select, for the farmer, a knowledge of the origin, formation, composition, physical properties and chemistry of soils will be gained. The chemistry and botany of plant development are considered, and a vast amount of fundamental facts regarding soils and plants are collated from researches of experimenters the world over. No one with a pretense of studying agriculture, can think of being without them. They give the primary facts that will enable one to read works upon the art and science of agriculture intelligently. Price two dollars each.

A complete list of works will make this article too long, and I will defer its completion until another time, giving the firms from which the books may be procured, unless the editors of the *RURAL WORLD* will undertake to furnish them as ordered.

Respectfully,  
J. W. SANBORN.

They may all be ordered through the *RURAL WORLD*. EDITOR.

What the Government is Doing for Agriculture.

(From Dr. Loring's address at Bangor, Sept. 12, 1884. Photographically reported for the *RURAL WORLD*















Wm. B. CROWLEY, 15 WEST 42ND ST., N. Y. C.







## The Dairy.

## Officers Mississippi Valley Dairy and Creamery Association.

President—Norman A. Colman, St. Louis.  
Vice President—Jos. W. Drury, Waterloo, Ill.  
Second Vice President—Joseph E. Miller, Belleville, Ill.  
Treasurer—Wm. N. Tivy, 424 North Second St. St. Louis.  
Secretary—Joseph W. Sheppard, 600 Olive street St. Louis.

Although cattle were excluded from the St. Louis Fair this year, we noticed that Messrs. Bacon & Campbell, of Manchester, St. Louis Co., Mo., were on the grounds with a team, meeting old customers and making new ones. They report sales of the head of Holsteins, that go to Illinois, Missouri and Kansas. In the lot was an eighteen-month bull that sold for \$300.

The report in our last issue, telling of the presentation of gold watch and chain to Mr. J. W. Sheppard, Secretary of the Mississippi Valley Dairy Association, in token of the appreciation of his work, by the merchants interested in the Dairy and Creamery Department of the St. Louis Fair, is a great honor that appears at first sight, inasmuch as it is, we believe, the first time in the history of the Fair that any one not officially connected with it, has received such a recognition.

## The Dairy and Creamery Department at the St. Louis Fair.

For the first time in the history of the St. Louis Fair, the Dairy and Creamery interest had a department exclusively to itself, and the large number of separate exhibits of implements and of the products of the Dairy and Creamery, attest the wisdom of the Association in giving this department the prominence it deserves. The co-operation of the Mississippi Valley and Creamery Association in this department brought it to the front, and resulted in making the exhibit, the largest and most successful Dairy and Creamery exhibit ever held at any Fair in the West. The Hall in which the exhibit was held, was about 38x150 feet, and was so arranged as to have the exhibit of butter and cheese displayed on inclined platforms, which were built for this occasion, running from one end of the building to the other on either side. At the entrance, the Salt Exhibits were to be seen on either side, while the implements were allotted to the space in the center, around which the people crowded in interested groups.

The first exhibit of implements which attracted the visitors' notice as they entered the Hall, was the display made by Davis and Rankin of Chicago, Ill., who exhibited a full line of creamery churns and butter-making implements; and of the well known Fairbanks scale company, Mr. W. H. Folson, who had charge of this exhibit, reports that the week was the busiest one he has spent for many a year, and that he is satisfied with the result; he reports having made some good sales.

Next to him was the exhibit made by Cornish, Curtis & Green of Fort Atkinson, Wis., who made a large display of churns, butter workers, and smaller implements. Mr. W. H. Curtis had charge of this exhibit and reports a very satisfactory week's work.

Messrs. H. F. Batcheller & Son, Rock Falls, Ill., made a large exhibit of both large and small Batcheller churns, butter workers, churning power, etc., and Mr. J. M. Armstrong, who had charge, reports having sold out nearly all the goods he had on exhibition and as well taking orders for some goods yet to be delivered from the factory.

The adjoining exhibit was made by M. B. Buckner, Paducah, Ky., and consisted of some twenty or more churns. This gentleman did a very good business here last year, but at this he was not able to make so good a report, though he expressed himself as being well paid for the labor of exhibiting.

The Fairbanks Scale Company of St. Louis, occupied the raised platform next, and exhibited a number of scales, trucks, cheese boxes for the retail grocers, etc., etc. As this company had the field all to themselves it is surmised they did some good business, as the department was visited by many hundreds of farmers interested in dairying, beside the thousands of casual lookers on who thronged the Hall from morning till night.

J. J. Smith of Brownsville, Mo., secured honorable mention for his exhibit of a model creamery, beside which he stood the whole time of exhibition hours, and he was very successful. At the close of the week he expressed himself as satisfied, but as he said, his work consisted of sowing the seed, he hoped the harvest would be good.

The Vermont Farm Machine Co., Bellows Falls, Vt., exhibited a creamery and a novel churn which was swung on four rods of iron, and when churning had a swinging motion, which the gentleman in charge claimed as producing the best effect in making butter; he reported having done well for the time.

C. E. Willard & Co., Michigan Street, Chicago, Ill., made an exhibit of an engine and boiler complete, especially made for use in creameries. The engine was sold to the St. Louis Fair Company of this city. Mr. D. W. Wilson, who was in charge reports having had many inquiries for similar engines.

H. H. Palmer & Co., Rockford, Ill., made a very interesting display of revolving churns, suitable for the close of creamery. Mr. H. H. Palmer and his son were kept busy the whole week explaining the special merits, and at the end of the week found these two gentlemen in most excellent humor, the inference is that success had attended their efforts and they were satisfied.

A very good display of the Favorite Churn was made by Messrs. Blakeman & Dobson of Rockford, Ill., and attracted considerable attention, but as the exhibit was made more for an advertisement than to catch individual sales, as the firm prefer to sell to the jobbers in large lots, it is to be expected they accomplished their object, the gentleman in charge was very busy the whole week.

An interesting exhibit was made by John Wilhelm, Jr., of Wooster, Ohio, who displayed quite a number of cream raising cans. The gentleman is a good talker, and thoroughly understands his business, hence drew around him a crowd of listeners all the time. He reports himself well satisfied with the results.

The exhibit which drew around it the largest number of visitors in this department the whole week, was that made by the De Laval Cream Separator Co., 32 Park Row, New York City, who had on exhibition two of their centrifugal machines and one at work separating the cream from the milk, and also a number of creamery churns and other implements.

They were exhibited at the end of the hall, and the crowds of visitors had a good opportunity to see the working

of this new, novel and ingenious machine. Mr. Lespinasse, a widely known member of the press, had charge of the exhibit, and was kept so busy explaining the merits of the machine as to welcome the coming of the end of the fair. The two Centrifugal Machines, which he had on exhibition, were sold to the St. Louis Dairy Co., and the gentleman report having reasons to be pleased with this, their first exhibit at the St. Louis Fair.

**SALT EXHIBIT.**  
The Salt Exhibit contained entries from every large salt company in this country, and in England, and together made a display of salt which has perhaps never been seen or equaled in this country.

The American Dairy Salt Co., Syracuse, N. Y., were represented by Col. T. D. Curtis and Mr. Brown his assistant. These gentlemen made a gay display of salt in bags, fancy signs and flags, which attracted the eyes of the passers by, and drew attention to their stand. On this was piled some several thousand sample bags of salt, which were given to visitors. He also distributed many thousands of very pretty picture cards. Adjoining their exhibit was one made by Mr. H. McK. Wilson, of 114 North Second street, St. Louis, the western agent of the Hickson's Sifted Dairy Liverpool Salt, made a fine exhibit of their excellent product, many bags of which were piled into a pyramid, on the tops of which were entwined the stars and stripes and the union Jack. This gentleman was kept very busy the whole term of the Fair, explaining the many virtues of the Hickson Salt, and distributing his attractive cards.

J. F. Ewing, Agent for the Michigan Dairy Salt Co., 105 N. 3rd St., St. Louis, Mo., took the blue ribbon for display of salt, making as he did a very attractive exhibit in sample bags of all sizes; these were piled upon a series of shelves and decorated with many flags. Mr. J. W. Haney had charge of this exhibit and worked hard the whole week in distributing cards on which were printed the portraits of the political candidates of both parties. The demand for these was met, but it kept the printer at work most of the week.

The Higgins, Eureka, Salt Co., 115 Reade St., N. Y., made a very business like display of their salt and attracted much attention. They also displayed the silver pitcher, and black silk dress, which were the two premiums they offered for competition to the makers of butter. Mr. D. W. Wilson had charge of this exhibit, and the whole week in distributing some very fine fancy colored cards which were in great demand.

P. Moran & Co., Chicago, Ill., Agents for Rice's Pure Dairy Salt, made also a good display of this interest of salt. The stand on which the bags were piled, was decorated with fancy signs and flags, and its location made it the first exhibit seen on entering the hall.

Mr. Folson had charge and distributed large number of cards and pamphlets descriptive of the special merits of their esteemed brand.

There were three BUTTER COLOR MANUFACTURERS in the hall who vied with each other competing for the blue ribbon for display of goods.

Wells, Richardson & Co., Burlington, Vermont, represented by Mr. Glenn, made a very large and fancy display of butter color and during the whole week of the fair the gentleman in charge was busily occupied attending to those who were seeking information.

Messrs. Strickler Bros., Rockford, Ill., made a smaller display of Butter Color, but none the less did they attract the attention of those interested in butter making.

The exhibit was in charge of Mr. Strickler, who reported himself well satisfied with the results. This firm succeeded to the business of Messrs. Bea & Perry, who made a similar exhibition here last year.

F. B. Fargo & Co., Lake Mills, Wis., had on exhibition a large and pretty decorated display of Butter Color. Mr. Fargo was in charge, and kept busily employed throughout the week.

The different companies on Implements, Butter and Cheese, had a very difficult task to perform, the number of entries being very large, and the weather during the term of their duties, so very warm. The committees had a delicate and difficult duty to perform in this department, and several times had to retire. Especially was this so in the Salt and Butter Color awards, which alone was decided on the display, as the premium list reads, and not on merit.

The following list of premiums awarded, and the addresses of the successful competitors, is worth perusal:

**IMPLEMENTS.**  
Butter making utensils.  
Display of Revolving Churns.  
Cornish, Curtis & Green, Fort Atkinson, Wis.  
Prize, bronze medal.  
Churns with dashers or floaters.  
J. M. Buckner, Paducah, Ky.

1st prem., bronze medal.  
Display of factory churns.  
H. T. Batcheller & Son, Rock Falls, Ill.

1st prem., bronze medal.  
Display of power butter workers.  
Davis & Rankin, Chicago, Ill.

Bronze medal.  
Display of butter workers for farm dairies.  
Cornish, Curtis & Green, Fort Atkinson, Wis.

Bronze medal.  
Display of butter trays and boards.  
Cornish, Curtis & Green, Fort Atkinson, Wis.

Bronze medal.  
Display of butter moulds.  
Cornish, Curtis & Green, Fort Atkinson, Wis.

Bronze medal.  
Display butter ladles.  
Cornish, Curtis & Green, Fort Atkinson, Wis.

1st prem., bronze medal.  
Display butter printers.  
Cornish, Curtis & Green, Fort Atkinson, Wis.

1st prem., bronze medal.  
General display of implements for butter making.  
De Laval Cream Separator Co., 32 Park Row, New York City.

Wagon or device for transporting cream from farm to creamery.  
J. M. Harney, Florissant, Mo.  
1st prem., bronze medal.  
Cabinet creamery for farm use, honorable mention.  
Vermont Farm Machine Co., Bellows Falls, Vt.

Model of creamery building, honorable mention.  
J. J. Smith, Brownville, Mo.

Best display of salt.  
J. T. Ewing, St. Louis, Mo.  
Quality not considered.  
The committee could not agree regarding the award on butter color as to quality. But as to display award the blue ribbon to the Richardson & Co., Burlington, Vt.

**BUTTER AND CHEESE.**  
Class A. Davis & Rankin. Three prizes.  
1st, \$300.  
2nd, \$150.  
3rd, \$50.

4th, Silver Medal.  
1st, Elmer Cook, Conklin, Shirland, Ill. Represented by R. Hartman & Co., St. Louis, Mo. Prize, \$300.  
2nd, Alma Creamery Co., Alma, Wis. Represented by G. E. Wetzel, St. Louis, Mo. Prize, \$150.

3rd, P. Klapp & Co., Mason, Ill. Represented by Hudson Bros., St. Louis, Mo. Prize, \$50.  
4th, H. R. Williams, Portage, Wis. Represented by Truesdell & Biggers, St. Louis, Mo.

Prize, silver medal.  
TUESDAY, OCT. 22, BUTTER AND CHEESE.  
Class B. Butter and cheese dealers.  
1st, Chas. B. Comstock, Green City, Mo. Represented by Hoffman Bros., St. Louis, Mo. Prize, \$100.

2nd, G. E. Wetzel, St. Louis, Mo. Prize, \$50.  
3rd, H. A. Rehbein, St. Louis, Mo. Prize, \$25.  
Class B. Butter and cheese dealers, St. Louis, Mo. Tub of butter made any where.

1st, Wm. Heidenreich, Woodbine, Ill. Represented by R. Hartman & Co., St. Louis, Mo. Prize, \$50.  
2nd, M. M. McKean & Co., St. Louis, Mo. Prize, \$25.

Best cheese display. Ten cheeses made anywhere.  
1st, C. E. Udell & Co., St. Louis, Mo. Prize, \$25.  
2nd, C. E. Udell & Co., St. Louis, Mo. Prize, \$25.

3rd, C. E. Udell & Co., St. Louis, Mo. Prize, \$25.  
Class C. By F. Moran & Co., Chicago, Ill. Rice's Pure Dairy Salt used.  
1st, J. McClane, Batavia, Ia. Represented by Hoffman Bros., St. Louis, Mo. Prize, \$50.

2nd, M. M. McKean & Co., St. Louis, Mo. Prize, \$25.  
3rd, S. L. McCredie, Barrington, Ill. Represented by F. Moran & Co., Chicago, Ill. Prize, silver medal.

Class D. By J. F. Ewing, Michigan Dairy Salt used.  
1st, Hiawatha Creamery Co., Hiawatha, Kansas. Represented by W. N. Tivy, St. Louis, Mo. Prize, \$100.

2nd, S. L. McCredie, Barrington, Ill. Represented by F. Moran & Co., Chicago, Ill. Prize, silver medal.  
3rd, J. F. Ewing, Michigan Dairy Salt used.

Class E. By L. A. Davis, Chicago, Ill. Hickson's Sifted Dairy Salt used.  
1st, Jas. Campbell, Lake Zurich, Ill. Prize, \$100.

2nd, S. L. McCredie, Barrington, Ill. Represented by F. Moran & Co., Chicago, Ill. Prize, silver medal.  
3rd, J. F. Ewing, Michigan Dairy Salt used.

Class F. By the American Dairy Salt Co., Syracuse, N. Y.  
1st, J. McClane & Swan, Winnebago, Ill. Represented by Truesdell & Biggers, St. Louis, Mo. Prize, \$50.

2nd, Adams & Sons, Chillicothe, Mo. Represented by G. E. Wetzel, St. Louis, Mo. Prize, silver medal.  
3rd, J. F. Ewing, Michigan Dairy Salt used.

Class G. Holsteins Breeders' Association of America.  
1st, M. M. McKean, St. Louis, Mo. Prize, \$50.  
2nd, 2nd prize awarded.

Class H. Grand sweepstakes, De Laval Cream Separator Co., 32 Park Row, New York City. Represented by Hausen-duble Bros., St. Louis, Mo. Prize, \$100.

Class I. One Tub of Butter salted with Higgins Eureka Salt, E. I. Baker, Edmund, Wis. Represented by R. Hartman & Co., St. Louis, Mo. Prize, silver pitcher.

Class L. Ladies Sweepstakes, by Higgins Eureka Salt Co.  
1st, Mrs. Eastwhite. Represented by W. N. Tivy, St. Louis, Mo. Prize, \$100.

2nd, W. N. Tivy, St. Louis, Mo. Prize, \$50.  
3rd, W. N. Tivy, St. Louis, Mo. Prize, \$25.

Class M. Fairbanks Scale Co. Prize, scale valued at \$50, double beam scale.  
Roder Bros., St. Louis, Mo.

Class K. Sweepstakes Creamery Butter.  
1st, M. M. McKean & Co., St. Louis, Mo. Prize, \$75.

Sweepstakes Dairy Butter.  
1st, H. Merriman, Ft. Atkinson, Wis. Represented by W. N. Tivy, St. Louis, Mo. Prize, \$75.

Class L. Butter made in Missouri.  
1st, C. B. Comstock, Green City, Mo. Represented by Hoffman Bros., St. Louis, Mo. Prize, \$50.

2nd, Adams & Sons, Chillicothe, Mo. Represented by W. N. Tivy, St. Louis, Mo. Prize, \$25.  
3rd, W. N. Tivy, St. Louis, Mo. Prize, \$25.

Class N. Cheese made any where.  
1st, L. L. Horton, Arcadia, N. Y. Represented by C. E. Udell, St. Louis, Mo. Prize, \$50.

2nd, A. C. Hoyt, Mansfield, N. Y. Represented by C. E. Udell & Co., St. Louis, Mo. Prize, \$25.  
3rd, J. M. Douglas, who had official charge of this department, filled the position with credit to himself, and well earned the thanks of the exhibitors, who were indebted to him for many favors, which was ever ready to grant when in his power.

**Special Mention.**  
The well-known firm of H. F. Batcheller & Son, manufacturers of Dairy and Creamery Supplies, Rock Falls, Ill., came to the St. Louis Fair this year with the largest display of implements of their own manufacture they had ever put on exhibition at any fair, though they have made it a practice to attend all the large fairs held in the West for some years past.

Their exhibit consisted of twelve Dairy Churns, two large Factory Churns, one Dog Power with Churn attached, three Butter Workers, and a number of smaller implements. They succeeded in capturing two blue ribbons, and in making many sales. Their Churns recommend themselves to the observant man as being the easiest to handle, and most durable, being made in barrel shape and hung on pivots at the side. They are made of hard wood, varnished on the outside, have no interior fixtures, and have a large movable head made to fit tightly; the Churn is almost if not quite perfect. It is therefore no wonder the sale of them continues to increase from year to year as they become known. During the week this company distributed freely a descriptive catalogue of the goods of

their own make, which any one can have for the writing.  
By all means write for it before purchasing elsewhere.

**Holstein Transfers.**  
BULLS.  
Matilda K's Col. 2859, W. A. Pratt, L. L. Kirby, Jerseyville, Ill.  
Dick Spanza 778, Chas. Crapser, J. H. Rhodes, Little Falls, Minn.

Aesop 1457, Smith & Powell, J. Demmon & Son, Yorkville Centre, N. Y.  
Antonia Franklin 3240, J. D. Guthrie, E. P. Bryan, Frankfort, Ky.  
B. F. Vandal, 963, G. P. Weber, J. Johnson, Lincoln, Ill.

Baron Cookdale 2911, Michael Cook & Son, F. Pagels, Longueville, Quebec.  
Clandeboe 2904, Lord Cook & Son, E. B. Hazard, Pictou, Ont.  
Billy Boy 2554, Chumsey Sears, E. Smith, Walhalla, Mass.

Harpy 3165, R. C. Washburn, I. M. Allyn.  
Eckie 631, D. Severy & Son, M. N. Trumbo, Maquoketa, Ia.  
Eckie 681, M. N. Trumbo, Home Farm Fine Stock Co., Hampton, Ia.

Uncle Tom 163, G. S. Miller, Smith & Powell, Syracuse, N. Y.  
Apollo 492, J. V. Herron, D. B. Smith, Guthrie, Ky.  
Surtida 4153, Clara Guthrie 4147, J. A. Bell, J. D. Guthrie, Shelbyville, Ky.

Maud Hamming 6351, Grant Noxon, B. B. Lord & Son, Sincelairville, N. Y.  
Oona 4313, W. R. Pratt, L. L. Kirby, Jerseyville, Ill.  
Pyralis 4211, W. A. Pratt, Mill's Bros., Ann Arbor, Mich.

Belle 96, J. H. Comer, Dr. L. Johnson, Coldwater, Mich.  
Belle 55, Dr. L. Johnson, J. H. Rhodes, Little Falls, Minn.  
Rapid Ann 626, Rapid Ann 3rd 632, W. Fullerton, R. R. T. Adams, Lynchburg, Va.

Esther Alexander 2nd 4407, Smith & Powell, C. M. McGinn, Knoxville, Tenn.  
Fidella 330, Fiddell 2nd 2992, Smith & Powell, J. Demmon & Son, Yorkville Centre, N. Y.

Enstall 614, L. S. Fredericks, J. D. Guthrie, Shelbyville, Ky.  
Enstall 614, J. D. Guthrie, E. P. Bryan, Frankfort, Ky.  
June 819, June 2nd 8645, J. D. Guthrie, Hiram Berry, Frankfort, Ky.

Birdie Belle 2497, Tragetta 2496, S. M. Neal, H. Berry, Frankfort, Ky.  
Camella 782, C. Crapser, Pond Bros., Bloomington, Minn.  
Madam Cornelia 179, G. F. Clare & Sons, R. D. Updegrave, Cleveland, O.

Nellie Bell 3045, Lena L. 3045, M. Cook & Son, E. B. Hazard, Pictou, Ont.  
Nellie Bell 2nd 3023, M. Cook & Son, W. N. Randall, Brockville, Ont.

Presses Ida 5025, Lord Cook & Son, W. N. Randall, Brockville, Ont.  
Glynis 5127, Lord Cook & Son, E. B. Hazard, Pictou, Ont.  
Byron Lassie 5024, Lord Cook & Son, F. Pagels, Longueville, Quebec.

Archie 5020, Lord Cook & Son, F. Pagels, Longueville, Quebec.  
Cupola 6297, B. B. Lord & Son, Mrs. W. Louchery, Louisville, N. Y.  
Kate Beestner 1139, D. S. Blanding, K. L. Boynton, Griswold, Mich.

Thos. B. Wales, Jr., Sec'y., Iowa City, Ia., Oct. 11th, 1884.

## The Pig Pen.

The exhibit of swine at the St. Louis Fair compared very favorably with any fair heretofore held. A large number of extra pens had to be improvised to afford the accommodation called for. The following are the awards:

**CLASS A—BEST SWINE.**—Best boar 2 years old and over—First prem., \$20, B. F. Dorsey & Sons, Perry, Ill.; 2nd, \$10, J. J. Renfro & Sons, Collinsville, Ill.

Best boar 1 year and under 2—First prem., \$15, N. H. Gentry, Sedalia, Mo.; 2nd, \$10, B. F. Dorsey & Sons, Perry, Ill.

Best boar 6 months and under 1 year—First prem., \$10, D. W. Todd, Urbana, O.; 2nd, \$5, Clifford & White, Wellington, O.

Best boar under 6 months—First prem., \$10, Matthews & Daub, Jacksonville, Ill.; 2nd, \$5, Ed. Scott.

Best sow 2 years old and over—First prem., \$20, N. H. Gentry, Sedalia, Mo.; 2nd, \$10, A. Fulford, Bel Air, Md.

Best sow 1 year and under 2—First prem., \$15, B. F. Dorsey & Sons, Perry, Ill.; 2nd, \$10, N. H. Gentry, Sedalia, Mo.

Best sow 6 months and under 1 year—First prem., \$10, W. C. Norton, Aldensville, Pa.; 2nd, \$5, N. H. Gentry, Sedalia, Mo.

Best sow under 6 months—First prem., \$10, W. C. Norton, Aldensville, Pa.; 2nd, \$5, N. H. Gentry, Sedalia, Mo.

Best sow with litter of her own pigs, under 6 months old, not less than five, owned by exhibitor—First prem., \$30, S. H. Todd, Waukegan, O.; 2nd, \$15, Daub & Mathers, Jacksonville, Ill.

Best sow with litter of her own pigs, under six months old, not less than five in number, owned by exhibitor—First prem., \$20, S. H. Todd, Waukegan, O.

**CLASS C—POLAND CHINA.**  
Best boar, two years and over—First prem., \$20, Davis & Frazier, Moreland, Ind.; 2nd, \$10, W. C. Williams & Co., Kiptown, Ind.

Best boar, one year and under two—First prem., \$15, Mugg & Seagrave, Center, Ind.

Best boar, six months and under one year—First prem., \$10, W. C. Williams & Co., Knightstown, Ind.; 2nd, \$5, Taylor Bros., Waynesville, Ill.

Best boar, under six months—First prem., \$10, Mugg & Seagrave, Center, Ind.

Best pen of breeding hogs, to consist of one boar and four sows of any age, owned by exhibitor—First prem., \$30, W. C. Williams, Knightstown, Ind.; 2nd, \$15, G. N. Helms, McCordsville, Ind.

**CLASS D—DURCO JERSEYS.**  
Best boar two years and over—First prem., \$20, A. Ingram, Perry, Ill.; 2nd, \$10, F. Craycroft, Sedalia, Mo.

Best boar one year and under two—First prem., \$15, G. W. Stoner, LaPlace, Ill.; 2nd, \$10, J. L. Mustard, Lebanon, Mo.

Best boar six months and under one year—First prem., \$10, Geo. W. Stoner, LaPlace, Ill.; 2nd, \$5, A. Ingram, Perry, Ill.

Best boar under 6 months—First prem., \$10, C. H. Holmes & Co., Grinnell, Ill.; 2nd, \$5, C. J. Stuckey, Atlanta, Ill.

Best sow 2 years and over—First prem., \$20, C. H. Holmes & Co., Grinnell, Ill.; 2nd, \$10, C. J. Stuckey, Atlanta, Ill.

Best sow 1 year and under 2—First prem., \$15, C. H. Holmes & Co., Grinnell, Ill.; 2nd, \$10, same.

Best sow, 6 months and under 1 year—First prem., \$10, C. H. Holmes & Co., Grinnell, Ill.; 2nd, \$5, same.

Best sow under 6 months—First prem., \$10, A. Ingram, Perry, Ill.; 2nd, \$5, C. J. Stuckey, Atlanta, Ill.

Sweepstakes—Best boar any age—First prem., \$20, G. W. Stoner, LaPlace, Ill.; 2nd, \$10, G. W. Stoner, LaPlace, Ill.

Best pen of breeding hogs of any distinct breed, not named in the premium list, to consist of one boar and four sows of any age, owned by exhibitor—First prem., \$30, G. F. Davis & Co., Dyer, Ind.; 2nd, \$20, same.

Best sow of any age of any distinct breed, not named in the premium list, with litter of her own pigs, not less than five in number, owned by exhibitor—First prem., \$20, G. F. Davis & Co., Dyer, Ind.; 2nd, \$10, same.

Best sow of any age of any distinct breed, not named in the premium list, under six months old—First prem., \$15, G. F. Davis & Co., Dyer, Ind.; 2nd, \$5, same.

Best sow of any age of any distinct breed, not named in the premium list, under six months old, not less than five in number, owned by exhibitor—First prem., \$15, G. F. Davis & Co., Dyer, Ind.; 2nd, \$5, same.

**CLASS E—SMALL WHITE YORKSHIRES.**  
Best boar, 2 years and over—First prem., \$20, V. C. Norton, Aldensville, Pa.; 2nd, \$10, S. A. Kaye, Old County farm, city.

Best boar, 1 year and under 2—First prem., \$15, E. Sites, West Dover, O.; no second.

Best boar, 6 months and under 1 year—First prem., \$10, W. C. Norton, Aldensville, Pa.; 2nd, \$5, same.

Best boar, under 6 months—First prem., \$10, W. C. Norton, Aldensville, Pa.; 2nd, \$5, same.

Best sow, 2 years and over—First prem., \$20, W. C. Norton, Aldensville, Pa.; 2nd, \$10, S. A. Kaye, Old County farm, city.

Best sow, 1 year and under 2—First prem., \$15, W. C. Norton, Aldensville, Pa.; 2nd, \$10, E. Sites, West Dover, O.

Best sow, 6 months and under 1 year—First prem., \$10, W. C. Norton, Aldensville, Pa.; 2nd, \$5, same.

Best sow, under 6 months—First prem., \$10, W. C. Norton, Aldensville, Pa.; 2nd, \$5, same.



